

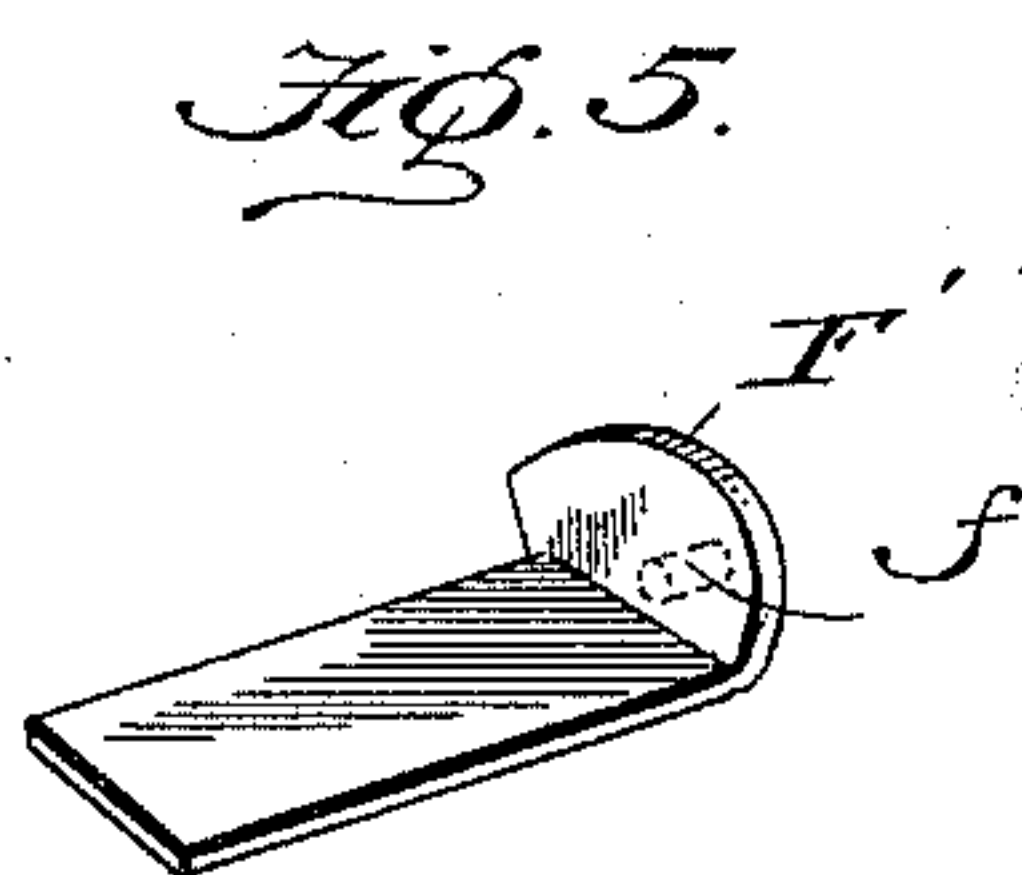
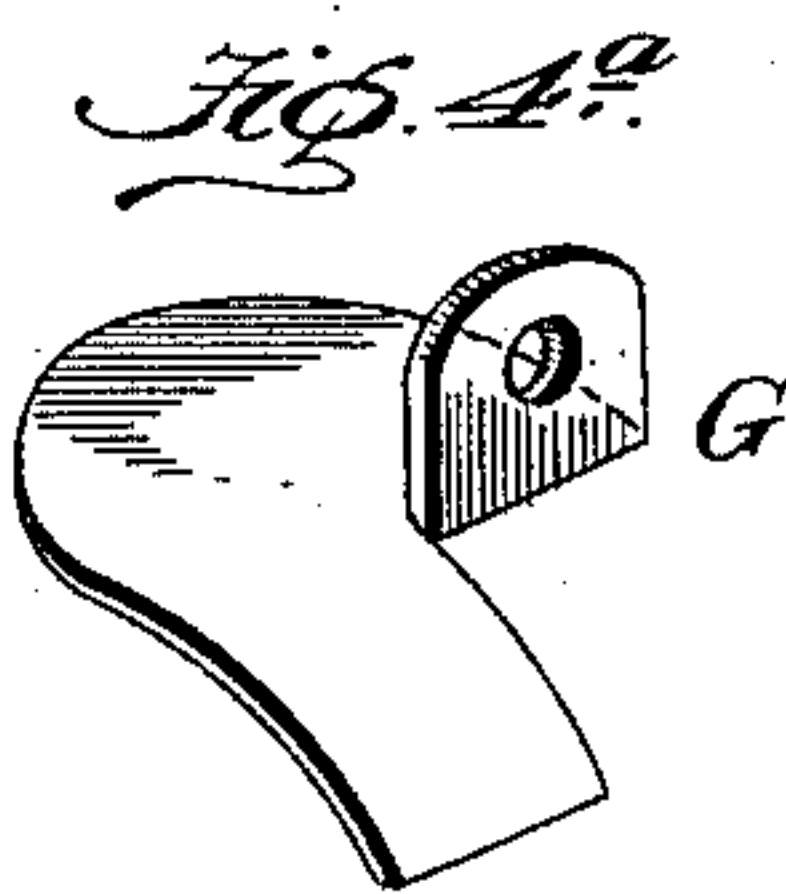
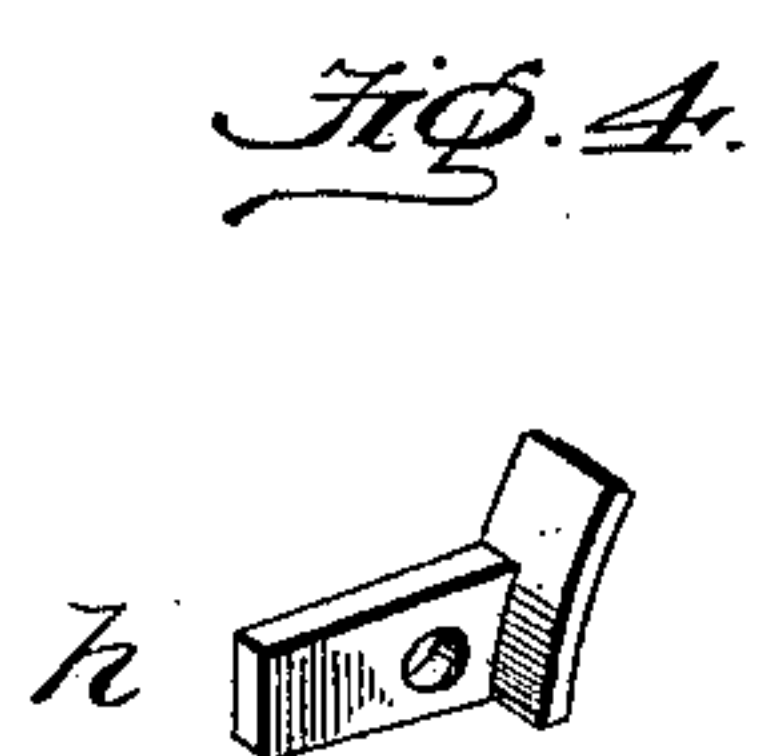
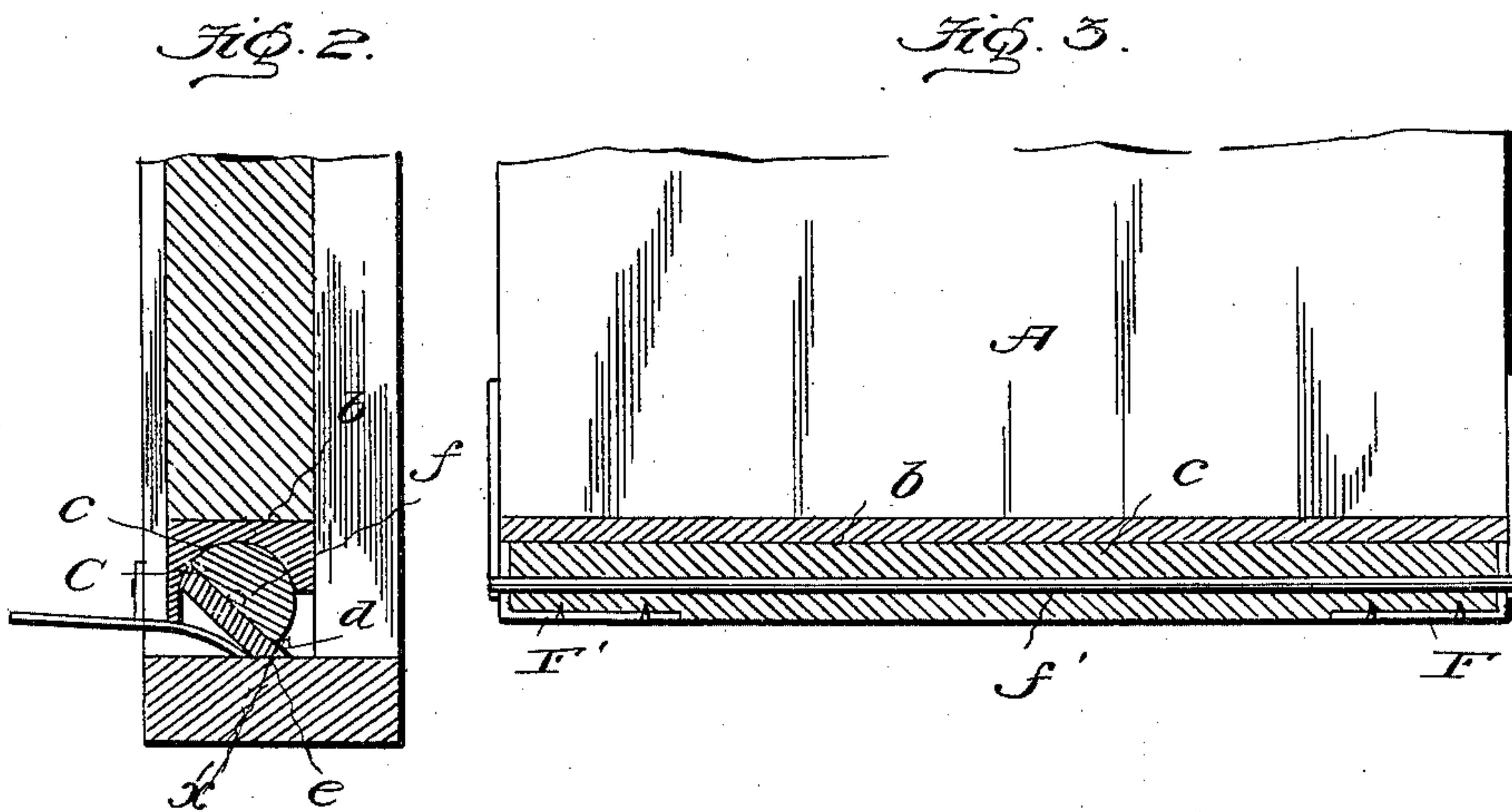
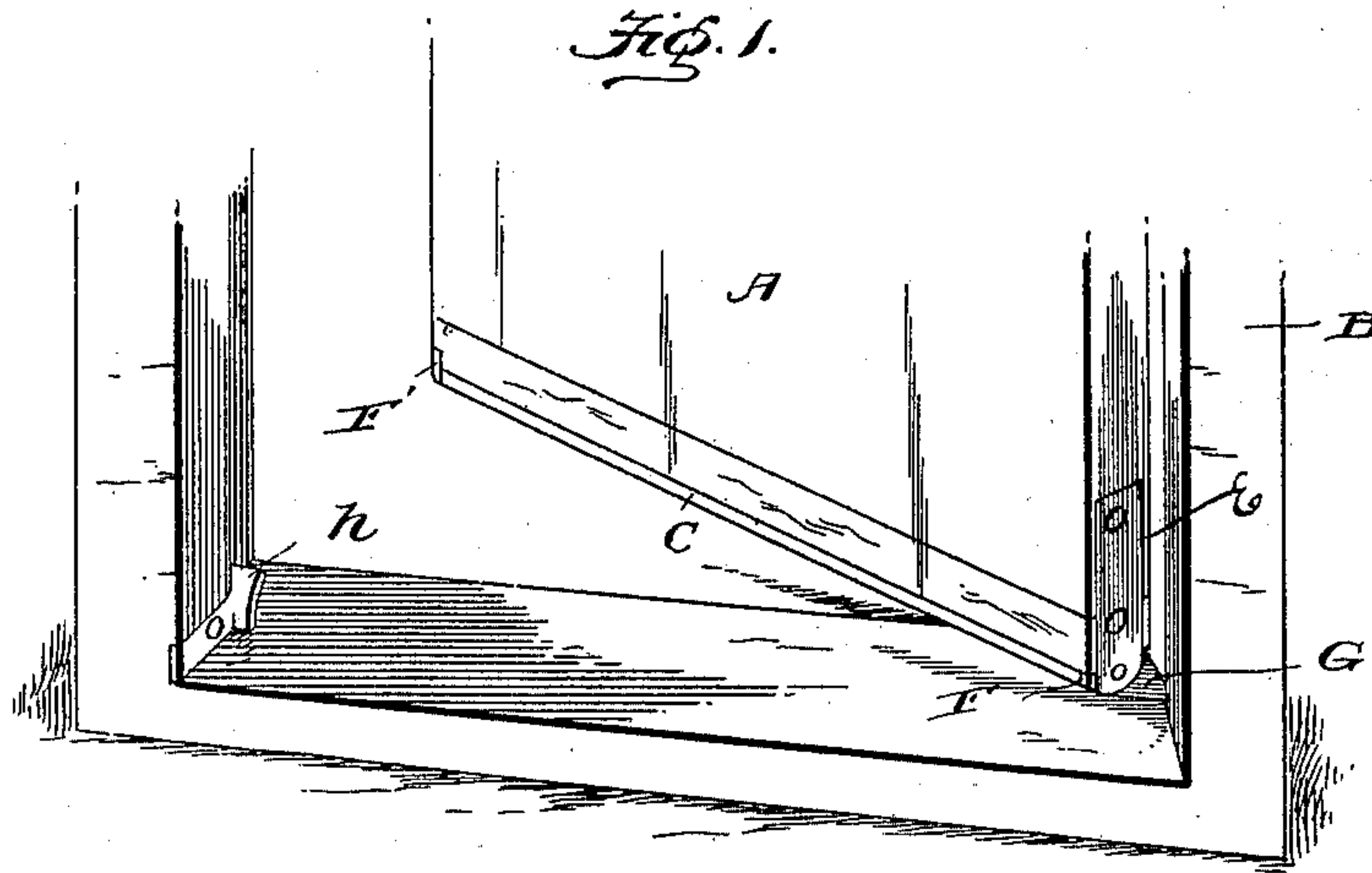
No. 610,864.

Patented Sept. 13, 1898.

T. A. LONG.
CARPET AND WEATHER STRIP.

(Application filed Aug. 27, 1897.)

(No Model.)



Witnesses:
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Att'y.

UNITED STATES PATENT OFFICE.

THEODORE AVERY LONG, OF HARRISBURG, PENNSYLVANIA.

CARPET AND WEATHER STRIP.

SPECIFICATION forming part of Letters Patent No. 610,864, dated September 13, 1898.

Application filed August 27, 1897. Serial No. 649,730. (No model.)

To all whom it may concern:

Be it known that I, THEODORE AVERY LONG, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Weather-Strips; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to weather-strips for doors; and the invention consists in the construction, combination, and arrangement of parts, substantially as hereinafter described, and particularly pointed out in the claim.

The objects of the invention are to simplify the construction, to dispense with springs, make the parts more durable, and to render the employment of carpet-strips unnecessary.

In the accompanying drawings, in which I have shown the preferred form of embodiment of my invention, Figure 1 is a view of my device attached to a door with the strip in its raised position. Fig. 2 is a view with the door closed or the strip in its lowered position. Fig. 3 is a longitudinal sectional view showing a modified construction of my weather-strip. Figs. 4 and 4^a are detail views of the guide-plates. Fig. 5 is a detail view of one of the pivot-plates.

Like letters of reference denote corresponding parts in all the figures of the drawings.

A denotes the door, and B the door-frame. At the base of the door A, or preferably in a strip attached to the door, I provide my pivoted weather-strip C.

The lower edge of the door or strip attached thereto is provided with a groove *b*, which receives the door-strip C, the upper surface *c* of which is curved to fit the form of the groove *b*. The outer wall of the groove is cut away to allow the flange *d* to be raised up against said wall. The inner and lower edge of the door-strip is chamfered, beveled, or flanged, as at *e*, to provide the same with a surface to bear upon the door-sill when the door is closed. Each end of the door-strip is provided with a metal plate F, which provides durable bearings for the supporting-pins *f*, which are pivoted in the plates E, secured to

the edges of the door. In lieu of these pins *f* a single rod *f'*, extending entirely through the strip C and between the two parts composing the same, may be substituted for said pins. I have shown the said strip as made in two parts; but it is apparent that it can be made in a single piece without departing from my invention.

As shown in the drawings, the strip C is made of two parts, the upper portion having a cylindrical face which fits snugly in the groove *b*, while the lower portion has the chamfered or flanged surface *e*, which forms an angle at *x*. The outer plate F' is of such a form that it preferably projects a little beyond the strip in order to take the wear of the guide-plate *h* away from the strip C in closing the door.

It will be observed that when the door is closed the lower face of the flange or chamfered portion *e* rests upon the sill, while its upper face, in connection with the curved surface of the door-strip C, forms an angle *x* to receive the force of the rain as it is driven against the strip by the wind, and thus serves to prevent the latter from forcing the rain strongly against the joint between the weather-strip and the door-sill.

G is a broad guide-plate that is bolted or otherwise suitably united to the door-frame B, and thence extends into the door-frame and downwardly against the sill, thus forming a spiral or beveled plate against which the lower surface of the weather-strip C rests and by which it is lifted to its closed position when the door is opened.

In my improved weather-strip I wholly dispense with the use of a spring or springs to lift the hinged part of the weather-strip when the door is opened, and in view thereof I provide permanent fixtures by which the hinged strip is forced positively and firmly upon the sill when the door is closed and by which the hinged strip is positively raised and held in such raised position when said door is opened. The stop-plate *h* is fastened to one door-jamb in the path of the advancing edge of the hinged strip when the door is closed, so that the hinged strip will engage with said stop in a manner to positively depress the strip and hold it firmly upon the sill when the door is closed. The broad plate G projects from the

inner face of the joint to which the door is hinged, and said plate G presents its broad gradually-ascending face to the hinged strip in a manner to have the latter ride upon the
 5 plate when the door is opened, whereby the hinged strip is gradually raised in a positive manner during the opening movement of the door, and the said strip rests upon and is sus-
 10 tained in its raised position by the broad curved plate the whole time that the door remains open.

It will also be observed by reference to Fig. 2 that the lower edges of the recessed door terminate in different horizontal planes, the
 15 front edge lying above the rear edge of the recess. This is advantageous in that provision is made for the angular edge or face x of the strip fitting snugly against the raised front edge of the door-recess to have the
 20 hinged strip disposed compactly in the recess of and flush with the front face of the door.

I am aware that changes and alterations in the form and proportion of parts and in the details of construction of the devices herein
 25 shown and described as the preferred embodiment of my invention may be made by a skilled mechanic without departing from the spirit or sacrificing the advantages thereof,

and I therefore reserve the right to make such modifications as fairly fall within the scope 30 of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A weather-strip comprising a member or 35 section of plano-convex cross-sectional contour, and a flat plate rectangular in cross-section and of a width slightly in excess of the width of the face of the plane side of the first-named member or section to which said plate 40 is united to have one edge protrude beyond the convex face for a short distance, forming a reëntrant angle x , the lower edge of said protruding part of the plate being beveled at e , combined with a recessed door in which the 45 weather-strip is hinged, an inclined lifting arm in the path of the strip, and means for depressing said strip, substantially as described.

In testimony whereof I affix my signature 50 in presence of two witnesses.

THEODORE AVERY LONG.

Witnesses:

CHAS. P. WALTER,
 WILLIAM WOLFINGER.